

### ABSTRACT

A sensor element is provided, in particular an oil condition sensor element, having a sensing area that is in contact with a fluid, in particular an oil. During operation, the sensing area is able to detect a measured variable characterizing a physical and/or chemical property of the fluid. For this purpose, at least some regions of the sensing area have a metal plating or a metallic structure that is applied directly to a plastic surface. In addition, a fluid sensor is provided having a sensor element of the type described above, as well as an additional sensor element that differs from the first sensor element, this additional sensor element being able to detect a measured variable characterizing a physical and/or chemical property of the fluid during operation.